

## **Remarks**

### **Claims and Specification Status:**

Claims 1-3, 4-12, and 14-21 are pending in the application. Claims 2 and 13 are canceled without prejudice. Dependent claim 21 is newly presented.

Claims 1, 3, 11, 12, 14, 17 and 20 are amended without prejudice.

Claim 1 is amended to generally recite the features of now-canceled claim 2.

Claim 3 is amended in independent form to generally recite the features of the former version of claim 1. Some specific changes relative to former claim 1 are noted below.

Claim 11 is amended to change the terms “digital signature” to --cryptographic hash--.

Claim 12 is amended to generally recite the features of now canceled claim 13.

Claims 14 and 17 are amended in independent form and each generally recites the features of the former version of claim 12.

Claim 20 recites – in combination with other features – routing a signal to a remote apparatus based at least in part on the reference code.

### **Art-Based Rejections:**

Claims 1-3, 5-15 and 17-20 stand rejected under EP0650146 (Kodak) in view of U.S. Patent No. 5,613,004 (Cooperman).<sup>1</sup> Claim 9 stands rejected under Kodak, in view of Cooperman and in further view of U.S. Patent No. 5,467,447 (Vogel). Claim 16 stands rejected under Kodak, in view of U.S. patent No. 5,475,205 (Behm). We respectfully traverse these rejections.

#### *Claim 1*

Claim 1 recites – in combination with other features – a processor which receives a digital representation and a reference code associated therewith. *The reference code is*

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<sup>1</sup> The Office Action appears to contain an error by suggestion that this rejection is a §102(a) “anticipation” rejection. The text of the Office Action, however, uses “obvious” language, suggesting that the rejection should be a §103 rejection. This response interprets the rejection as an obviousness rejection.

*included in the digital representation.* The processor includes an authentication information reader, and the processor: i) employs the reference code to retrieve the second authentication information associated therewith from the storage system.

Kodak does not show that a reference code, which is employed to retrieve second authentication information from a storage system, is included in a digital representation. Rather, it appears that the validation requestor identification code is merely sent to a validation requestor. This appears to be separate from any digital representation. See, e.g., Col. 3, lines 16-26.

Kodak at Col. 5, lines 34-58 calculates a pre-approval code from image data, but uses the validation requestor identification code to know which algorithm to use for the calculations. It is this requestor identification code that is separately sent, and not included in a digital representation.

Claim 1 stands ready for allowance.

### *Claim 3*

Claim 3 recites – in combination with other feature – a key is stored in the storage system and associated with the reference code; and the processor further employs the reference code to retrieve the key; and the authentication information reader uses the key to read the first authentication information. The processor receives the digital representation *along with* a reference code associated therewith.

As discussed above with respect to claim 1, in Kodak, it appears that the validation requestor identification code is merely sent to a validation requestor. This code does not appear to be sent along with any digital representation. See, e.g., Col. 3, lines 16-26.

Claim 3 stands ready for allowance.

### *Claim 11*

Claim 11 recites that the embedded first authentication information is a *cryptographic hash* embedded as a watermark in a graphic on the analog form.

The term “cryptographic hash” is intended to cover an equivalent – if not even broader – scope relative to “digital signature”.

The Office Action cites Kodak Col. 5, lines 25-34 are discussing a “digital signature”. We respectfully disagree.

In the context of that passage, we submit that a more reasonable reading is that the term “signature” means a human, handwritten signature.

Claim 11 also stands ready for allowance.

*Claim 12*

Claim 12 recites – in combination with other features – an analog form converter employing a communications system to send a digital representation and a reference code to a verification system, the reference code is included in the digital representation.

Claim 12 should be allowed for at least reasons analogous to those presented above under claim 1.

*Claim 14*

Claim 14 recites – in combination with other features – a reference code is sent in association with but not as part of a digital representation.

Claim 14 should be allowed for at least reasons analogous to those presented above under claim 3.

*Claim 17*

Claim 17 recites – in combination with other features – an analog form converter analyzing a digital representation to determine whether a verification system can check the authenticity of the digital representation before sending the digital representation.

The Office Action cites Kodak at Col. 1, line 55 – Col. 2, line 16 as meeting these features.

We respectfully disagree.

While the cited passage may discuss visual verification of card, there is no discussion of a determination of whether a verification system can check authenticity before sending the digital representation.

Claim 17 stands ready for allowance.

*Claim 20*

Claim 20 recites – in combination with other features – routing a signal to a remote system or device based at least in part on the reference code. Kodak is not understood to making routing decision based on a reference code (or on, e.g., a validation requestor identification code).

Claim 20 stands ready for allowance.

*Claim 8*

Claim 8 recites that a source receives the reference code from a user of the source.

The Office Action cites to a PIN number supplied by a user. See the Office Action at page 4, lines 5-6.

Recall that in the context of claim 8 (and base claim 1) the reference code is used to obtain authentication information from a storage system.

We see no nexus between the PIN at Kodak, col. 7, lines 20-25, and any authentication information as claimed.

Moreover, Kodak at Col. 7, lines 20-25, teaches away from using user supplied information by stating: “Another advantage is that the cardholder **will not** be required to carry any additional information, such as a PIN number....” (*emphasis added*). This teaches against using user supplied information.

The cited col. 3, lines 20-34, passage is not helpful either.

The rejection of this claim should be removed as well.

*Claim 10*

Claim 10 recites that there is a plurality of the apparatuses in the network; and a given one of the apparatuses uses the *reference code* to route the received digital representation and the reference code to another one of the apparatuses.

Here, the reference code is used to route the digital representation and the reference code to another of the apparatuses.

Recall that in the context of claim 10 (and base claim 1) the reference code is used to obtain authentication information from a storage system.

The Office Action cites to Kodak at Col. 6, lines 19-30, as meeting these features. We disagree.

The cited passage refers to modem communication, but says nothing regarding a *reference code used to route* the digital representation and the reference code to another of the apparatuses

The rejection of claim 10 should be removed as well.

*Remaining Claims*

The remaining claims are also believed to recite patentable combinations. Favorable consideration is respectfully requested.

**Conclusion:**

Withdrawal of the above-noted rejections is respectfully requested. We look forward to our upcoming interview; And, in the meantime, the Examiner is invited to contact the undersigned with any questions.

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Respectfully submitted,

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